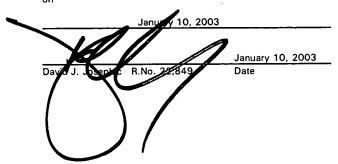
**PATENT** 

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Serial No:

09/410,916

Filed:

October 1, 1999

Applicant:

Jerome H. Ludwig

Title:

STERILIZATION OF FIRE SPRINKLER SYSTEMS

Art Unit:

1744

Examiner:

Monzer R. Chorbaji

Atty Dkt:

PIPE/04

Cincinnati, Ohio 45202

January 10, 2003

Commissioner for Patents Washington, D.C. 20231

Sir:

In reply to the Office Action dated July 31, 2002, and the Extension of Time to respond thereto up until January 31, 2003, submitted herewith, reconsideration is respectfully requested for claims 23-31 in the above-identified application.

The Examiner has rejected claims 23-31 over applicant's earlier Ludwig et al U.S. Patent No. 6,076,536 in view of Singh U.S. Patent No. 5,52,249 under 35 U.S.C. § 103. It is applicant's position that the rejection is replete with assumptions, without factual basis and, accordingly, must fail for the following reasons.

## ASSUMPTION 1.

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The Examiner assumes that applicant's Ludwig '536 teaches "a plurality of heat-sensitive sprinkler heads" and "inactivating a sprinkler heads by first removing them", with reference to col. 5, lines 20-21. This is <u>not</u> correct with reference to applicant's earlier Ludwig '536 patent where it is stated that "the sprinkler head is first removed and the system is connected to a manifold, etc." (col. 5, lines 20-21). Therefore, applicant's earlier Ludwig '536 does <u>not</u> disclose a fire sprinkler system containing a <u>plurality of heat-sensitive sprinkler heads</u>, nor does it teach <u>inactivating</u> them.

### ASSUMPTION 2.

The Examiner assumes that applicant's earlier Ludwig '536 patent "involves removing some water" when in fact that patent is based upon <u>adding</u> an aqueous cleaning solution to the section to be cleaned (col. 3, lines 39-40).

### ASSUMPTION 3.

The Examiner contends that "removing the sprinkler heads before or during the application of the sterilant is well within the scope of the artisan." However, applicant's Ludwig '536 does not disclose heat-sensitive sprinkler heads and, obviously, the Examiner's assumption that in any event sprinkler heads may be removed before or during the application, indicates a lack of understanding of applicant's method. Applicant is using steam which would affect the heat-sensitive sprinkler heads and render applicant's method inoperative if, as the Examiner suggests, the sprinkler heads were present during the application of the steam.

### ASSUMPTION 4.

The Examiner contends "when the sprinkler heads are removed, then it is an intrinsic step to cover such openings in order to clean the interior of the system." There is absolutely no support in applicant's Ludwig '536 for this assumption. Applicant's main claim 23 requires the inactivation of heat-sensitive sprinkler heads during the delivery of the steam by removing them and replacing them with temporary fittings.

## ASSUMPTION 5.

The Examiner has concluded that applicant's Ludwig '536 patent "teaches delivering of sterilant heated" to "10° celsius to 80° celsius" which "may intrinsically include steam." In contrast, Lugwig '536 teaches the use of an

"aqueous <u>cleaning</u> solution" not a "sterilant" as the Examiner contends. Further, it is <u>impossible</u> to make steam at such temperatures.

## ASSUMPTION 6.

The Examiner improperly seeks to combine Singh '249 as a reference in the art for sterilizing a fire sprinkler system, when, in fact, Singh makes no such disclosure or suggestion. Singh '249 employs steam to sterilize a transfer conduit, not a complex fire sprinkler system. While Singh does teach a temperature sensor/discharge valve at the end of the transfer line, it does not teach the use of temperature sensors to insure sterilization of his conduit, let alone a complex fire sprinkler system that is isolated according to applicant's method with the inactivation of sprinkler heads, the use of temperature sensors in the isolated section, and sterilizing the section, followed by returning the section in the system to operation. In other words, Singh is totally deficient when reference is made to the claimed steps of applicant's main method 23 for thermally sterilizing a fire sprinkler system and all claims 24-31 which depend therefrom.

The MPEP, under Section 706.02(j) states:

To establish a *prima facie* case of obviousness, three basic criteria must be met. <u>First</u>, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. <u>Second</u>, there must be a reasonable expectation of success. <u>Finally</u>, the prior art reference (or references when combined) <u>must teach</u>

or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP § 2143 - 2143.03 for decisions pertinent to each of these criteria. (Emphasis added.)

With respect to claims 24-25, 26-28, 29, 30 and 31, the Examiner continues to make assumptions with respect to applicant's Ludwig '536 in the rejection of these claims. Applicant's Ludwig '536 patent does not teach the purging of sterilant with gas. It is not intrinsic for the Ludwig '536 method to use sterile gas or sterilized water. The Examiner assumes that the choice of the medium to maintain the treated section upon return to operation is within the scope of the artisan without any basis whatsoever. As stated above, Ludwig '536 does not teach removing heat sensitive sprinkler heads, replacing them with temporary fittings, sterilizing sprinkler heads, etc. In other words, the Examiner's rejection of subclaims 24-31 has no factual support and is predicated upon assumptions.

# **CONCLUSION**

Clearly, there is no *prima facia* case for obviousness under 35 U.S.C. § 103 that has been made out by the Examiner in his Office Action of July 31, 2002. Accordingly, an allowance of claims 23-31 is respectfully requested.

If any further issue remains, the Examiner is encouraged to contact the undersigned attorney.

Respectfully submitted,

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